The new degree of comfort.™

Rheem *Prestige* Series™ Communicating Two Stage Variable Speed Multi position Gas Furnaces

R96V- Series

96% A.F.U.E.†
Input Rates from 40 to 115 kBTU
[11.72 to 33.71 kW]

All Models except R96VA085

†A.F.U.E. (Annual Fuel Utilization Efficiency) calculated in accordance with Department of Energy test procedures.

- 96% residential gas furnace CSA certified
- 4 way multi-poise design
- Two stages of operation to save energy and maintain optimal comfort level.
- Variable speed blower motor technology provides ultimate humidity control, quieter sound levels, and year round energy savings.
- EcoNet™ enabled HVAC Product
- PlusOne™ Diagnostics 7-Segment LED all units
- PlusOne™ Ignition System – DSI for reliability and longevity
- PlusOne™ Water Management System with patented Blocked Drain Sensor
- Heat exchanger is removable for improved serviceability. Aluminized steel primary and stainless steel secondary construction provide maximum corrosion resistance and thermal fatigue reliability.
- Low profile “34 inch” cabinet ideal for space constrained installations.
- Blower Shelf design – serviceable in all furnace orientations
- Pre marked hoses – insures proper system drainage
- Vent with 2" or 3" PVC
- Replaceable Collector box
- Hemmed edges on cabinet and doors
- Quarter turn fasteners for tool less access
- Integrated control boards feature dip switches for easy system set up
- Self priming condensate trap
- Solid bottom included
- Compatible with single or two stage thermostats. For optimal performance a two stage thermostat is recommended.

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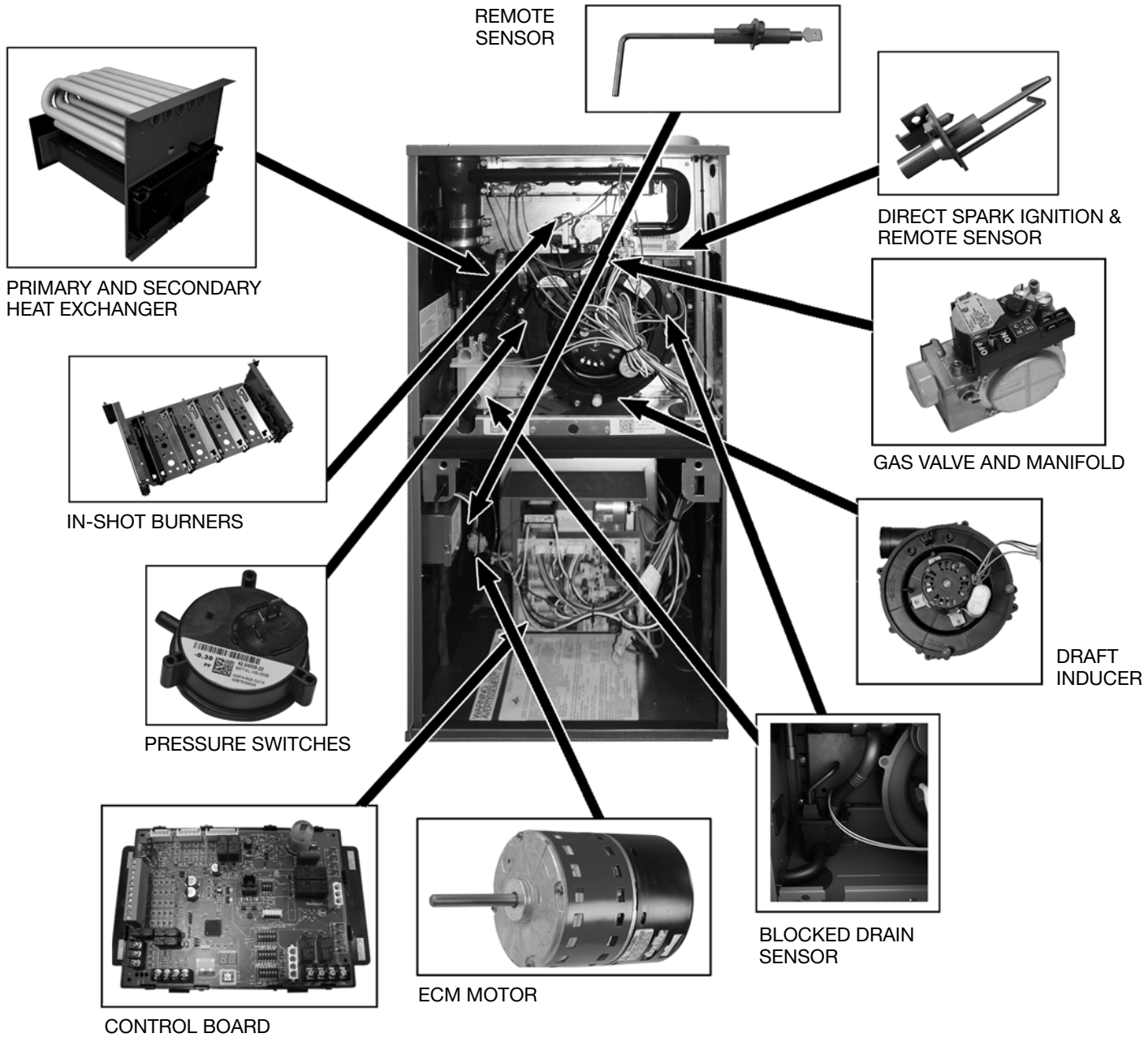


STANDARD EQUIPMENT

Completely assembled and wired; blocked drain sensor, 7 segment LED and marked hoses; heat exchanger; primary: aluminized steel, secondary: 29-4C stainless steel; 2 stage induced draft; pressure switches; redundant 2 stage main gas control; blower compartment door safety switch; solid state time on/off blower control; limit controls; manual shut-off valve; 100% safety lock out; cool fan off delay; field selectable heat fan off delay; one hour automatic retry; power and self-test diagnostics; flame sense current diagnostics; electronic air cleaner connections; twinning (built-in) features; humidifier connections; humidifier on/off delay; low speed continuous fan option; single speed option for heating and cooling applications; transformer; direct drive, variable speed electrically commutated blower motor (ECM). Solid bottom. (Please note: a thermostat is not included as standard equipment.)

OPTIONAL EQUIPMENT

Side and bottom filter racks; return air cabinet for all sizes.

NOTE: Furnace is not listed for use with fuels other than natural or L.P. (propane) gas.

All models can be converted by a qualified distributor or local service dealer to use L.P. (propane) gas without changing burners. Factory approved kits must be used to convert from natural to L.P. (propane) gas and may be ordered as optional accessories from a parts distributor.

For L.P. (propane) operation, refer to Conversion Kit Index Form.

WARNING

THIS FURNACE IS NOT APPROVED
OR RECOMMENDED
FOR USE IN MOBILE HOMES

Physical Data and Specifications—Upflow Models
U.S. and Canadian Models

MODEL NUMBERS	R96VA0402317MSA	R96VA0602317MSA	R96VA0702317MSA	R96VA0852521MSB	R96VA1002521MSA	R96VA1152524MSA
HIGH FIRE INPUT BTU/HR [kW] ①	42,000 [12.31]	56,000 [16.41]	70,000 [20.50]	84,000 [24.61]	98,000 [28.72]	112,000 [32.82]
LOW FIRE INPUT	29,400 [8.61]	39,200 [11.49]	49,000 [14.36]	58,800 [17.23]	68,600 [20.11]	78,400 [23.00]
HEATING CAPACITY BTU/HR [kW]	40,320 [11.82]	53,760 [15.75]	67,200 [19.68]	80,640 [23.63]	94,080 [27.57]	107,520 [31.51]
HIGH ALTITUDE OUTPUT 10% DERATE [kW] ②	36,288 [10.64]	48,384 [14.18]	60,480 [17.72]	72,756 [21.27]	84,672 [24.81]	96,768 [28.36]
BLOWER (D x W) [mm]	11 x 7 [279 x 178]	11 x 8 [279 x 203]	11 x 8 [279 x 203]	11 x 10 [279 x 254]	11 x 10 [279 x 254]	11 x 11 [279 x 279]
MOTOR H.P. [W]– TYPE	1/2 [373] E.C.M.	1/2 [373] E.C.M.	1/2 [373] E.C.M.	3/4 [559] E.C.M.	3/4 [559] E.C.M.	3/4 [559] E.C.M.
MOTOR FULL LOAD AMPS	8.9	8.9	8.9	10.8	10.8	10.8
MINIMUM EXT. STATIC PRESSURE (IN. W.C.) [kPa]	.18 [.045]	.20 [.050]	.23 [.057]	.28 [.070]	.28 [.070]	.28 [.070]
MAXIMUM EXT. STATIC PRESSURE (IN. W.C.) [kPa]	1.0 [0.249]	1.0 [0.249]	1.0 [0.249]	1.0 [0.249]	1.0 [0.249]	1.0 [0.249]
HEATING CFM @ .2" [.049 kPa] W.C. E.S.P. [L/s]	1050 [496]	1025 [484]	1015 [479]	1470 [694]	1710 [807]	1450 [684]
COOLING CFM @ .5" [.124 kPa] W.C. E.S.P. [L/s]	1050 [496]	1050 [496]	1050 [496]	1750 [826]	1750 [826]	1750 [826]
TEMPERATURE RISE-HIGH FIRE RANGE IN DEGREES °F [°C]	20 - 50 [11 - 28]	30 - 60 [17 - 33]	40 - 70 [22 - 39]	30 - 60 [17 - 33]	40 - 70 [22 - 39]	45 - 75 [25 - 42]
TEMPERATURE RISE-LOW FIRE RANGE IN DEGREES °F [°C]	15 - 45 [8 - 25]	20 - 50 [11 - 28]	30 - 60 [17 - 33]	20 - 50 [11 - 28]	30 - 60 [17 - 33]	35 - 63 [19 - 36]
APPROX. SHIPPING WEIGHT (LBS.) [kg]	128 [58]	128 [58]	132 [60]	147.5 [67]	152 [69]	165 [75]
AFUE ③	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%

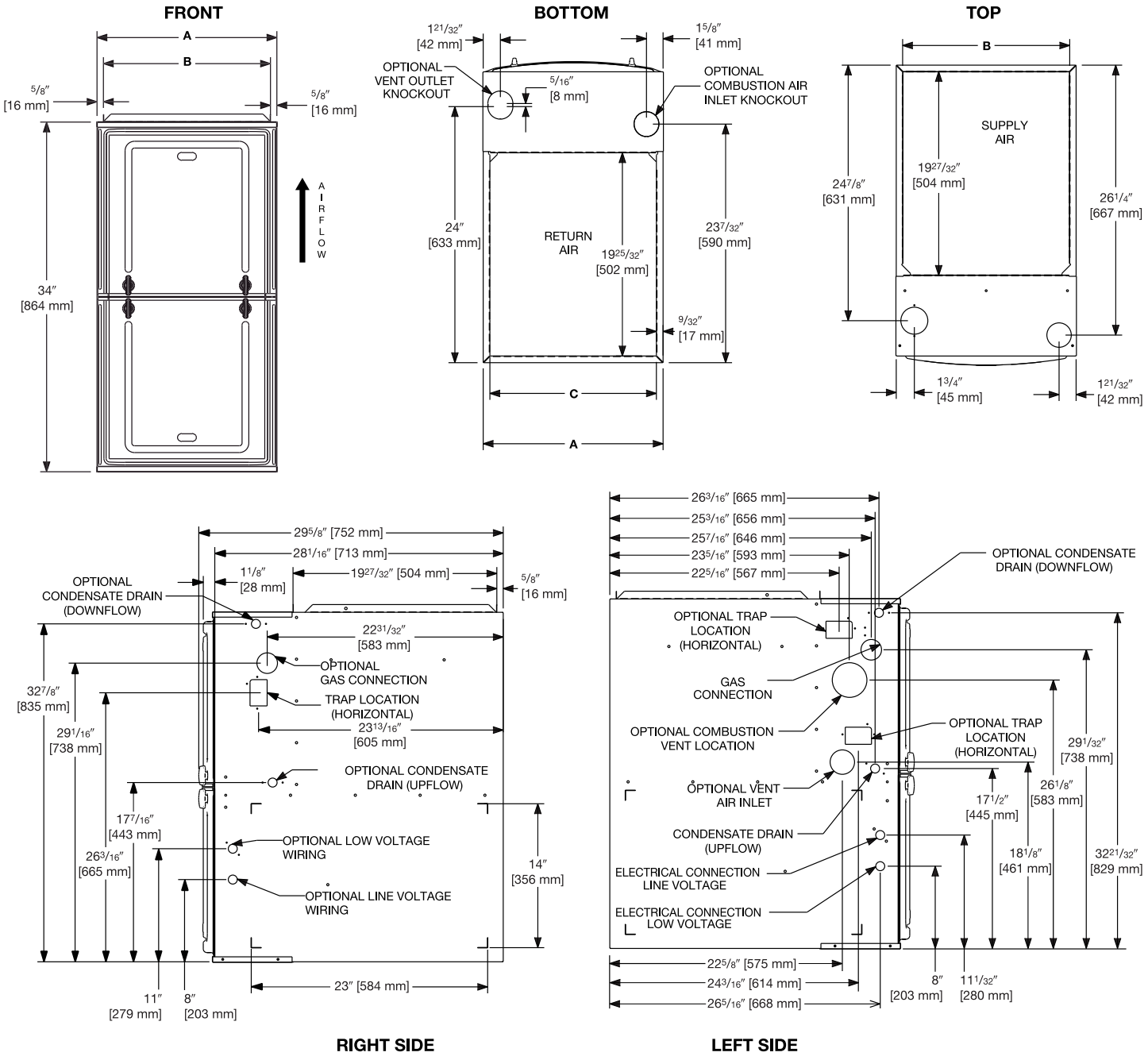
NOTES: All models are 115V, 60HZ, 1 phase Gas connection size for all models is 1/2" [13 mm] N.P.T.
① Installation instructions for high altitude derate.
② Canadian installations only.
③ In accordance with D.O.E. test procedures.
*S=Standard Models
NOTE: Standard model complies with California low nox requirements.

[ ] Designates Metric Conversions

Model Number Identification

R	96	V	A	—	040	2	3	17	M	S	A
Rheem	96% Efficient	Motor - ECM	Design Series A = 1st Design		Input BTU/HR 040 = 42,000 [12.31 kW] 060 = 56,000 [16.41 kW] 070 = 70,000 [20.51 kW] 085 = 84,000 [24.62 kW] 100 = 98,000 [28.72 kW] 115 = 112,000 [32.82 kW]	Stage - Two	Airflow 3 - Up to 3 Tons 5 - Up to 5 Tons	Cabinet Width 17 = 17.5" 21 = 21.0" 24 = 24.5"	Configuration - Multi-Position	S = Standard N = NO_x	Revision - Marketing (A - First Time Release) (B - First Revision)

[ ] Designates Metric Conversions



UNIT DIMENSIONS (CLEARANCE TO COMBUSTIBLES)

MODEL R96V	LEFT SIDE	MINIMUM CLEARANCE (IN.) [mm]					SHIP WGTS.	FLANGE DIMENSIONS		
		RIGHT SIDE	BACK	TOP	FRONT	VENT		A	B	C
040	0	0	0	1 [25]	2 [51]	0	123.5 [56]	17 1/2 [445]	16 17/64 [413]	16 13/64 [412]
060	0	0	0	1 [25]	2 [51]	0	128 [58]	17 1/2 [445]	16 17/64 [413]	16 13/64 [412]
070	0	0	0	1 [25]	2 [51]	0	132 [60]	17 1/2 [445]	16 17/64 [413]	16 13/64 [412]
085	0	0	0	1 [25]	2 [51]	0	147.5 [67]	21 [533]	19 49/64 [502]	19 45/64 [500]
100	0	0	0	1 [25]	2 [51]	0	152 [69]	21 [533]	19 49/64 [502]	19 45/64 [500]
115	0	0	0	1 [25]	2 [51]	0	165 [75]	24 1/2 [662]	23 17/64 [591]	23 13/64 [589]

*A service clearance of at least 24" is recommended in front of all furnaces
Supply and return depicted as upflow configuration.
Flange configuration will vary depending on installation orientation.

[ ] Designates Metric Conversions

MODEL NUMBER				R96VA0402317MSA	R96VA0602317MSA	R96VA0702317MSA	R96VA0852521MSB	R96VA1002521MSA	R96VA115524MSA
TARGET GAS HEATING AIRFLOW	HIGH HEATING CFM [L/s]	SW 15 = OFF	SW 16 = OFF	1050 [496]	1025 [484]	1015 [479]	1470 [694]	1710 [807]	1450 [684]
		SW ON = ON	SW 16 = OFF	800 [378]	880 [415]	950 [448]	1235 [583]	1490 [703]	1300 [614]
		SW 15 = OFF	SW 16 = ON	1200 [566]	1250 [590]	1190 [562]	1850 [873]	1965 [927]	1700 [802]
		SW 15 = ON	SW 16 = ON	700 [330]	780 [368]	900 [425]	1120 [529]	1400 [661]	1225 [578]
	LOW HEATING CFM [L/s]	SW 13 = OFF	SW 14 = OFF	910 [429]	925 [437]	900 [425]	1300 [614]	1500 [708]	1250 [590]
		SW 13 = ON	SW 14 = OFF	690 [326]	750 [354]	770 [363]	1065 [503]	1335 [630]	1060 [500]
		SW 13 = OFF	SW 14 = ON	1040 [491]	1210 [571]	1050 [496]	1775 [838]	1800 [850]	1400 [661]
		SW 13 = ON	SW 14 = ON	607 [286]	660 [311]	700 [330]	925 [437]	1210 [571]	960 [453]
TARGET COOLING/ HEAT-PUMP AIRFLOW	HIGH COOLING CFM [L/s]	SW 4 = OFF	SW 5 = OFF	1050 [496]	1050 [496]	1050 [496]	1750 [826]	1750 [826]	1750 [826]
		SW 4 = ON	SW 5 = OFF	875 [413]	875 [413]	875 [413]	1400 [661]	1400 [661]	1400 [661]
		SW 4 = OFF	SW 5 = ON	700 [330]	700 [330]	700 [330]	1225 [578]	1225 [578]	1225 [578]
		SW 4 = ON	SW 5 = ON	525 [248]	525 [248]	525 [248]	1050 [496]	1050 [496]	1050 [496]
	LOW COOLING CFM [L/s]	SW 4 = OFF	SW 5 = OFF	788 [372]	788 [372]	788 [372]	1313 [619]	1313 [619]	1313 [619]
		SW 4 = ON	SW 5 = OFF	656 [310]	656 [310]	656 [310]	1050 [496]	1050 [496]	1050 [496]
		SW 4 = OFF	SW 5 = ON	525 [248]	525 [248]	525 [248]	919 [434]	919 [434]	919 [434]
		SW 4 = ON	SW 5 = ON	394 [186]	394 [186]	394 [186]	788 [372]	788 [372]	788 [372]

*S = Standard Models
NOTE Standard model complies with California low NOx requirements.

[ ] Designates Metric Conversions.

VENT TERMINATION KITS: =

RXGY-E02: Vertical/Horizontal Concentric Vent Termination Kit 2" Pipe (US Only)

RXGY-E02A: Vertical/Horizontal Concentric Vent Termination Kit 2" Pipe (US & Canadian)

RXGY-E03: Vertical/Horizontal Concentric Vent Termination Kit 3" Pipe (US Only)

RXGY-E03A: Vertical/Horizontal Concentric Vent Termination Kit 3" Pipe (US & Canadian)

RXGY-G02: Direct Vent Furnace Side Wall Vent 2" or 3" (US Only)

RXGY-D05: Combustion Air Drain Kit 2"

RXGY-D06: Combustion Air Drain Kit 3"

NEUTRALIZER KIT: RXGY-A01
(Replacement Cartridge 54-22120-01)

EXTERNAL BOTTOM FILTER (UPFLOW/HORIZONTAL) RACK: RXGF-CB

EXTERNAL SIDE (UPFLOW) FILTER RACK: RXGF-CD

EXTERNAL (DOWNFLOW) FILTER RACK: RXGF-CC

FILTER RACK FILTER SIZES* INCHES [mm]			
MODEL	**RXGF-CB (UPFLOW/ HORIZONTAL)**	**RXGF-CD (UPFLOW)**	**RXGF-CC (DOWNFLOW)**
R96VA040	15 3/4 x 25 [400 x 635]	15 3/4 x 25 [400 x 635]	12 x 20 [305 x 508]
R96VA060	15 3/4 x 25 [400 x 635]	15 3/4 x 25 [400 x 635]	12 x 20 [305 x 508]
R96VA070	15 3/4 x 25 [400 x 635]	15 3/4 x 25 [400 x 635]	12 x 20 [305 x 508]
R96VA085	19 1/4 x 25 [489 x 635]	15 3/4 x 25 [400 x 635]	12 x 20 [305 x 508]
R96VA100	19 1/4 x 25 [489 x 635]	15 3/4 x 25 [400 x 635]	12 x 20 [305 x 508]
R96VA115	22 3/4 x 25 [578 x 635]	15 3/4 x 25 [400 x 635]	14 x 20 [356 x 508]

*Filter racks are shipped without filters.
Filters shipped with furnace may be used or a suitable 1" [25.4 mm] filter.

[ ] Designates Metric Conversions

INDOOR COIL CASINGS

MODEL NUMBER
RXBC-D17A1
RXBC-D21A1
RXBC-D21B1
RXBC-D24A1

FOR HIGH ALTITUDES:

NOTE: For Canadian installations only, an optional derate (manifold gas pressure reduction) method may be used to adjust the furnace for altitude. See Installation Instructions for more information. This optional method may **NOT** be used for U.S. installations. See installation instructions as appropriate orifice change is required.

L.P. CONVERSION KIT: RXGJ-FP34

CONDENSATE PUMP KIT: PROSTOCK & 1PCB151TUL

DOWNFLOW/HORIZONTAL CONVERSION KIT: RXGY-CK

DOWNFLOW/HORIZONTAL LEFT ZERO CLEARANCE CONVERSION KIT: RXGY-ZK

COMBUSTIBLE FLOOR BASE: RXGC-B17
RXGC-B21
RXGC-B24

ECONET CONTROL

RECOMMENDED COMMUNICATING FURNACE CONTROL

RETST600SYS

CONTRACTOR BENEFITS:
- Auto/Self Configuration
- Day-at-a-glance scheduling, with programmable fan
- Intuitive wiring connections
- Dual fuel ready
- Automatically optimizes airflow
- System status & mode information
- Complete diagnostic information on display

HOMEOWNER BENEFITS:
- Large, easy to read icons and characters
- Auto-mode control
- Smart recovery
- Continuous Fan Mode (5 speeds)
- Humidity Control
- Water heater, pool heater integration* (check model compatibility)

***ECONET CONTROL ACCESSORIES:**
Wall Plate = RCPN-AMC08
Face Plate = RETSTFPL

IMPORTANT: *Existing Comfort Control² System Condensing Units & Heat Pumps are compatible with EcoNet when matched with a R96V Gas Furnace and with an EcoNet Translator (RETRN620CC2) installed on the Comfort Control² System control board.*

*Available through PROSTOCK®.

GENERAL TERMS OF LIMITED WARRANTY*

Rheem will furnish a replacement for any part of this product which fails in normal use and service within the applicable period stated, in accordance with the terms of the limited warranty.

***For complete details of the Limited and Conditional Warranties, including applicable terms and conditions, contact your local contractor or the Manufacturer for a copy of the product warranty certificate.**

Parts.....Ten (10) Years
Heat Exchanger .....Limited Lifetime
Limited Lifetime
Conditional Unit Replacement
(Registration Required) .....Ten (10) Years

The new degree of comfort.™

In keeping with its policy of continuous progress and product improvement, Rheem reserves the right to make changes without notice.

Rheem Heating, Cooling & Water Heating • P.O. Box 17010
Fort Smith, Arkansas 72917 • www.rheem.com

Rheem Canada Ltd./Ltée • 125 Edgeware Road, Unit 1
Brampton, Ontario • L6Y 0P5

INTEGRATED HOME COMFORT

PRINTED IN U.S.A. 10/14 QG FORM NO. G11-540 REV. 4